Annual Review of Neuroscience
Volume 9, 1986

CONTENTS

(Note: Titles of chapters in Volumes 5–9 are arranged by category on pages 000–00.)

ARTIFICIAL INTELLIGENCE AND THE BRAIN: COMPUTATIONAL STUDIES OF THE VISUAL SYSTEM, *Shimon Ullman* 1

NEUROTRANSMITTER RECEPTOR MAPPING BY AUTORADIOGRAPHY AND OTHER METHODS, *Michael J. Kuhar, Errol B. De Souza, and James Unnerstall* 27

NMR SPECTROSCOPY OF BRAIN METABOLISM IN VIVO, *James W. Prichard and Robert G. Shulman* 61

CYCLIC GMP CASCADE OF VISION, *Lubert Stryer* 87

CHEMO-ELECTRICAL TRANSDUCTION IN INSECT OLFACTORY RECEPTORS, *Karl-Ernst Kaissling* 121

ON REACHING, *Apostolos P. Georgopoulos* 147

INTERACTIONS BETWEEN RETINAL GANGLION CELLS DURING THE DEVELOPMENT OF THE MAMMALIAN VISUAL SYSTEM, *Carla J. Shatz and David W. Sretavan* 171

HISTAMINE AS A NEUROREGULATOR, *George D. Prell and Jack Peter Green* 209

GENETICS AND MOLECULAR BIOLOGY OF IONIC CHANNELS IN *DROSOPHILA*, *Mark A. Tanouye, C. A. Kamb, Linda E. Iverson, and Lawrence Salkoff* 255

HYBRIDIZATION APPROACHES TO THE STUDY OF NEUROPEPTIDES, *Joan P. Schwartz and Erminio Costa* 277

LINKAGE BETWEEN AXONAL ENSHEATHMENT AND BASAL LAMINA PRODUCTION BY SCHWANN CELLS, *Richard P. Bunge, Mary Bartlett Bunge, and Charles F. Eldridge* 305

VERTEBRATE OLFACTORY RECEPTION, *Doron Lancet* 329

PARALLEL ORGANIZATION OF FUNCTIONALLY SEGREGATED CIRCUITS LINKING BASAL GANGLIA AND CORTEX, *Garrett E. Alexander, Mahlon R. DeLong, and Peter L. Strick* 357

THE MOLECULAR NEUROBIOLOGY OF THE ACETYLCHOLINE RECEPTOR, *Michael P. McCarthy, Julie P. Earnest, Ellen F. Young, Seunghyon Choe, and Robert M. Stroud* 383

(*continued*)

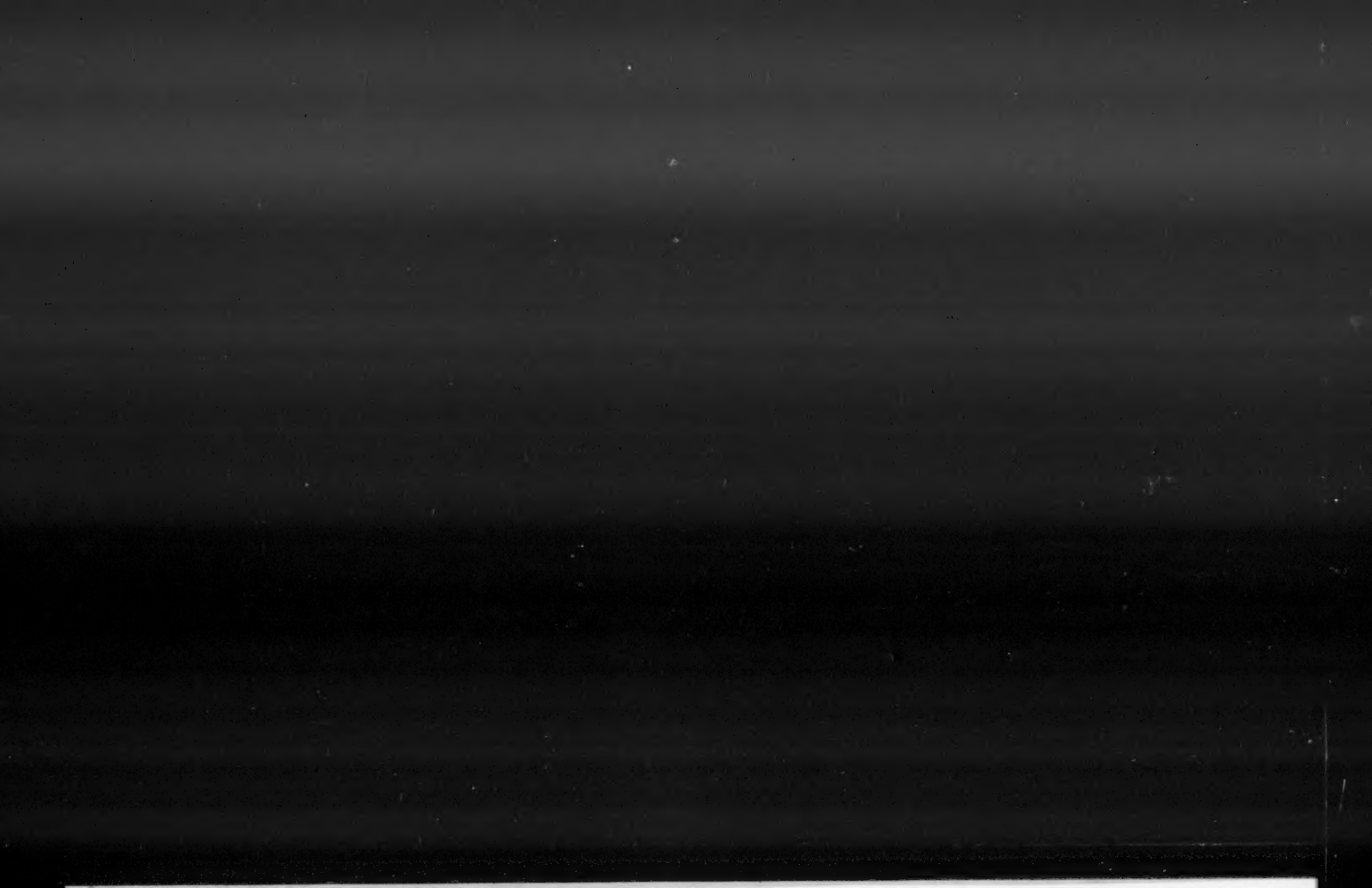
INACTIVATION AND METABOLISM OF NEUROPEPTIDES, *Jeffrey F. McKelvy and Shmaryahu Blumberg* 415

INVERTEBRATE LEARNING AND MEMORY: FROM BEHAVIOR TO MOLECULES, *Thomas J. Carew and Christie L. Sahley* 435

NEW PERSPECTIVES ON ALZHEIMER'S DISEASE, *Donald L. Price* 489

INDEXES

Subject Index 513

Cumulative Index of Contributing Authors, Volumes 5–9 526

Cumulative Index of Chapter Titles, Volumes 5–9 528